8888888888 888888888 88888888	88 8	AAAAAAA AAAAAAA AAAAAAA		00000000000000000000000000000000000000	KKK KKK KKK	KKK KKK KKK	UUU UUU UUU	UUU UUU UUU	PPPPPP PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	PPPPP
888	888	AA AAAAAAAAAAAA	A CCC		KKK	KKK	UUU	ŬŬŬ	PPP	PPP
BBB	888	AAA AA			KKK	KKK	UUU	UUU	PPP	PPP
888	888	AAA AA			KKK	KKK	UUU	UUU	PPP	PPP
888	888								PPP	PPP
88 8					KKK	KKK	UUU	UUU		
000	BBB	AAA AA			KKK	KKK	UUU	UUU	PPP	PPP
888	888	AAA AA			KKK	KKK	UUU	UUU	PPP	PPP
BBBBBBBBB	88 8	AAA AA	A CCC	•	KKKKKI	KKKK	UUU	UUU	PPPPPP	PPPPPP
88888888	88 8	AAA AA	A CCC		KKKKKI	KKKK	UUU	UUU	PPPPPP	PPPPPP
88888888		AAA AA			KKKKKI		ŬŬŬ	ŬŬŬ	PPPPPP	
88B	888	AAAAAAAAAAAA			KKK	KKK	ŬŬŬ	ÜÜÜ	PPP	
BBB	BBB	AAAAAAAAAAAA			KKK	KKK	ŬŬŬ	ŬŬŬ	PPP	
BBB	888	AAAAAAAAAAAA			KKK	KKK	ŬŬŬ	ŬŬŬ	PPP	
888	888	AAA AA			KKK	KKK	UUU	ŪŪŪ	PPP	
888	888	AAA AA			KKK	KKK	ŬŬŬ	ŬŬŬ	PPP	
888	BBB	AAA AA			KKK	KKK	ŬŬŬ	ŬŬŬ	PPP	
888888888		AAA AA		000000000000	KKK	KKK		เบบบบบบบับบั	PPP	
BBBBBBBBBB		AAA AA		000000000000000000000000000000000000000	KKK	KKK		เบบบบบบบบบบ	PPP	
888888888		AAA AA		555555555555555555555555555555555555555	KKK	KKK		บบบบบบบบบ	PPP	

	\$	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	111111 11 11 11 11 11 11 11 11 11	000000 0000000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
	\$				

.

Ĺ

```
O MODULE LISTJOUR (%TITLE 'List a journal file' IDENT = 'V04-000'
                  0001
                 0002
                  0004
                             BEGIN
                  0005
                  0006
                 0007
                  0008
                                   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
                  0009
10
                          1 !*
                  0010
11
                  0011
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12
13
                 0012
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                          1 !*
14
                 0014
                          1 1 *
                  0015
                           1 !*
16
17
                 0016
                          1 1
                  0017
                          1 !*
                          1 1 *
18
                  0018
                                    TRANSFERRED.
19012324567890
                 0019
                          1 1+
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                          1 !*
                  0021
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                                    CORPORATION.
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                           1 !*
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                                   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
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                 0028
                 0029
                 0030
31
                 0031
                 0032
323
333
335
337
339
                                FACILITY:
                                         Backup/Restore
                 0034
                 0035
                                ABSTRACT:
                 0036
                                         This module contains the routines that list a journal file.
                 0037
                 ŎŎ38
                                ENVIRONMENT:
                 0039
                                         VAX/VMS user mode.
40
                 0040
41
                 0041
42
                 0042
                                AUTHOR: M. Jack, CREATION DATE: 10-Apr-1981
45 467
                 0044
                                MODIFIED BY:
                 0045
                 0046
                                         V03-003 LY0490
                                                                                                                21-MAY-1984 16:12
                                                                            Larry Yetto
                 0047
                                                     Modify code to allow long directory names to be output.
48
49
55
55
55
55
55
55
                 0048
                 0049
                                         V03-002 LY0464
                                                     LY0464 Larry Yetto 1-FEB-1984 10:39 Add support for journal file structure level 2. This new
                                                                                                                1-FEB-1984 10:39
                 0050
                                                     format add a flag longword to each file entry to enable us to flag the fact that only a file header was saved for a particular file.
                 0051
                  0052
                  0053
                  0054
                  0055
                                         V03-001 ACG0313
                                                                            Andrew C. Goldstein,
                                                                                                                12-Feb-1983 16:23
56
                  0056
                                                     Add routine subtitles
57
                  0057
```

L151J0 V04-00	UR List a	journal file	L 1 16-Sep-1984 00:10:02	Page 2 (1)
: 58 : 59 : 60	0058 1 0059 1 0060 1	!	calling sequence to MATCH routine.	
58 59 60 61 62 63 64	0058 1 0059 1 0060 1 0061 1 0062 1 0063 1 0064 1	V02-001 MLJ0025 Impleme	Martin L. Jack, 8-May-1981 13:36 ent selective journal listing.	

! Evaluate selection criteria ! Driver for journal file listing

Match file specifications Open a journal file Read a journal record

Close a journal file Add information to line buffer

! Write line buffer to listing file

! Descriptor for buffer

! Listing buffer

SELECT_FILE, LIST_JOURNAL:

EXTERNAL ROUTINE
MATCH,
OPEN_JOURNAL:
READ_JOURNAL,
CLOSE_JOURNAL:
LIST_FAO:
LIST_EOL:

G\$DEFINE():

MACRO

MACRO

1 LITERAL

1646 1647 1648

1649 1650

1651 1652 1653

1654

1655 1656

1658 1659

1660

1661

1662

1663

1664

1665 1666

1667

1668

M 1657

86 87

88

89

96 97

98

99 100

101

102

104

105

106 107

108

109

110

111

112

114

NOVALUE:

NOVALUE,

P\$[0] %, P\$[2] %,

FAO_(A) =
LIST FAO(
UPLIT BYTE (%ASCIC A)
TE NOT %NULL(%REMAIN

EOL_(A) = LIST_EOL() %;

LIST_DESC= LIST_BUFFER= LIST_DESC(N)=

P\$SIZE=

NOVALUE, L_P\$ NOVALUE, L_P\$ NOVALUE;

! Define global common area

XIF NOT XNULL (XREMAINING) XTHEN , XFI XREMAINING) X,

VECTOR[_LIST_DESC,N] %;

2 + CH\$ALLOCATION(LIST_SIZE);

```
N 1
                     List a journal file SELECT_FILE - select file from journal
                                                                                       16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
LISTJOUR
                                                                                                                        VAX-11 Bliss-32 V4.0-742
                                                                                                                                                                                (3)
                                                                                                                                                                         Page
V04-000
                                                                                                                        [BACKUP.SRC]LISTJOUR.B32:1
                                %SBTTL 'SELECT_FILE - select file from journal' ROUTINE SELECT_FILE(NAME, CREDATE) =
                     1669
1670
   117
   118
                      1671
                      1672
   1674
1675
                                   FUNCTIONAL DESCRIPTION:
                                            This routine evaluates the selection criteria for a file specification
                     1676
1677
                                            retrieved from a journal file.
                     1678
1679
                                   INPUT PARAMETERS:
                                            NAME
                                                                 - Descriptor for file specification '[dir]nam.typ;ver'.
                     1680
1682
1683
1685
1686
1687
1689
1691
1693
                                            CREDATE
                                                                 - Pointer to quadword time value.
                                   IMPLICIT INPUTS:
                                            NONE
                                   OUTPUT PARAMETERS:
                                           NONE
                                   IMPLICIT OUTPUTS:
                                           NONE
                                   ROUTINE VALUE:
                                           True if the file specification is selected, false otherwise.
                     1694
1695
                                   SIDE EFFECTS:
                                           NONE
                     1696
1697
1698
1699
1700
1701
1702
1703
   144
   145
   146
   147
                                BEGIN
   148
                                MAP
   149
                                           CREDATE:
                                                                 REF VECTOR:
   150
151
152
153
154
155
                     1704
                                   BEFORE
                      1705
                     1706
1707
                                IF .QUAL[QUAL_BEFO] AND NOT .QUAL[QUAL_BEFO_BACK]
                                THEN
                     1708
1709
1710
   156
157
                                      BEGIN
                                      IF .CREDATE[1] GTRU .VECTOR[QUAL[QUAL_BEFO_VALUE], 1] THEN RETURN FALSE;
IF .CREDATE[1] EQLU .VECTOR[QUAL[QUAL_BEFO_VALUE], 1] AND .CREDATE[0] GEQU .VECTOR[QUAL[QUAL_BEFO_VALUE]
   158
                      1711
    159
                                      END:
                     1712
   160
   161
   162
                      1714
                                ! SINCE
                     1715
                     1716
1717
                                 IF .QUAL[QUAL_SINC] AND NOT .QUAL[QUAL_SINC_BACK]
   164
    165
                                THEN
                     1718
1719
   166
                                      BEGIN
                                      IF .CREDATE[1] LSSU .VECTOR[QUAL[QUAL_SINC_VALUE], 1] THEN RETURN FALSE;
IF .CREDATE[1] EQLU .VECTOR[QUAL[QUAL_SINC_VALUE], 1] AND .CREDATE[0] LSSU .VECTOR[QUAL[QUAL_SINC_VALUE]
    167
                      1720
1721
1722
1723
    168
    169
                                      END:
    170
    171
   172
                                   EXCLUDE
```

```
2
                         List a journal file SELECT_FILE - select file from journal
                                                                                                    16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
LISTJOUR
                                                                                                                                          VAX-11 Bliss-32 V4.0-742
V04-000
                                                                                                                                          [BACKUP.SRC]LISTJOUR.B32:1
                        1726 2 IF .QUAL[QUAL_EXCL]
1727 2 THEN
1728 3 BEGIN
1729 3 LOCAL
1730 3 EXCL:
1731 3
1732 3 EXCL = .QUAL[QUAL]
1733 3 WHILE .EXCL NEQ
1734 4 BEGIN
1735 4 IF MATCH(.NAIL)
1736 4 EXCL = .EXCL
1737 3 END:
    174
175
    176
    177
    178
                                                                           REF BBLOCK:
     179
                                            EXCL = .QUAL[QUAL_EXCL_LIST];
WHILE .EXCL NEQ O DO
BEGIN
    180
181
182
183
184
185
186
187
188
189
                                                  IF MATCH(.NAME, EXCL[QUAL_EXCL_DESC]) THEN RETURN FALSE;
                                                  EXCL = .EXCL[QUAL_NEXT];
                         1738
                                            END:
                         1739
1740
                                  2 ! SELECT
2 !F .QUAL[QUAL_SELE]
2 THEN
3 BEGIN
                         1741
1742
1743
     191
                         1744
1745
1746
1747
     192
    193
                                            BEGIN
    194
                                            LOCAL
                                                                           REF BBLOCK:
                                                  SELE:
    196
197
                         1748
                         1749
1750
                                            SELE = .QUAL[QUAL_SELE_LIST];
    198
199
                         1751
                                                  BEGIN
                         1752
1753
                                                  WHILE .SELE NEQ 0 DO
    200
201
202
203
204
205
206
207
208
210
211
212
                                                         BEGIN
                         1754
                                                         IF MATCH(.NAME, SELE[QUAL_SELE_DESC]) THEN EXITLOOP FALSE;
                          1755
                                                         SELE = .SELE[QUAL_NEXT];
                         1756
1757
1758
1759
1760
                                                         END
END
                                            THEN
                                                  RETURN FALSE;
                                  2 TRUE
1 END;
                                            END:
                         1761
1762
1763
                         1764
                                                                                                                    .TITLE LISTJOUR List a journal file
                                                                                                                     .IDENT
                                                                                                                                1004-0001
                                                                                                                    .PSECT COMMON, NOEXE, OVR.2
                                                                                              00000 GLOBAL_BASE:
                                                                                              ^0000 FREE_LIST:
                                                                                              00008 INPUT_WAIT:
                                                                                              00010 REREAD_WAIT:
                                                                                              00018 OUTPUT_WAIT:
                                                                                              00020 JPI_UIC:.BLKB
```

(**3**)

Page

```
00024 JPI_USERNAME:
                      12
               .BLKB
00030 JPI_DATE:
               .BLKB
00038 JPI_NODE_DESC:
               BLKB
00040 JPI_CURPRIV:
               .BLKB
00048 SYI_VERSION:
               .BLKB
0004C SYI_SID:.BLKB
00050 RWSV_HOLD_LIST:
00058 RWSV_CRC16:
               .BLKB
                      64
00098 RWSV_AUTODIN:
               .BLKB
                      64
000D8 RWSV_FILESET_ID:
              .BLKB
000E0 RWSV_VOLUME_ID:
               .BLRB 12
OODEC RWSV_VOL_NUMBER:
               .BLKB
000EE RWSV_SEG_NUMBER:
000FO RWSV_FILE_NUMBER:
               .BLKB
000f4 RWSV_SAVE_QUAL:
               BLKB
000F8 RWSV_SAVE_FAB:
               BLKB
OOOFC RWSV_CHAN:
               .BLKB
00100 RWSV_XOR_BCB:
00104 RWSV_IN_SEQ:
               BLKB
00108 RWSV_IN_SEQ_0:
               .BLKB
0010C RWSV_IN_XOR_SEQ:
               .BLKB
00110 RWSV_IN_XOR_RFA:
               .BLKB 6
00116 RWSV_LOOKAHEAD:
00117 RWSV_XORSIZE:
               .BLKB
00118 RWSV_IN_GROUP_SIZE:
.BLKB 4
0011C RWSV_IN_ERRORS:
               .BLKB
0011E RWSV_IN_XORUSE:
00120 RWSV_IN_ORGERR:
               .BLKB
00128 RWSV_IN_VBN:
              .BLKB
```

```
0012C RWSV_IN_VBN_0:
               BLKB
00130 RWSV_ALLOC:
               .BLKB
00134 RWSV_EOF:
00138 RWSV_OUT_SEQ:
0013C RWSV_OUT_VBN:
00140 RWSV_OUT_BLOCK_COUNT:
00144 RWSV_OUT_ERRORS:
00146 RWSV_SEQ_ERRORS:
00148 RWSV_OUT_GROUP_COUNT:
               BLKB
00149 RWSV_PADDING:
               .BLKB
0014C QUAL:
                      112
               .BLKB
001BC COM_SSNAME:
               .BLKB
001C4 COM_VALID_TYPES:
               BLKB
                      2
0016 COM_FLAGS:
               .BLKB
001C8 COM_PADDING:
               .BLKB
00109 COM_BUFF_COUNT:
001CA COM_I_SETCOUNT:
               .BLKB
001CB COM_O_SETCOUNT:
               .BLKB
001CC COM_I_STRUCNAME:
                     12
               .BLKB
001D8 COM_O_STRUCNAME:
                      12
               .BLKB
001E4 COM_O_BSRDATE:
                      8
               .BLKB
OOTEC ALT_SSNAME:
               BLKB
                      32
0020C INPUT_FUNC:
               .BLKB
0020D INPUT_RTYPE:
               .BLKB
0020E OUTPUT_FUNC:
               .BLKB
0020F FAST_STRUCLEY:
               .BLKB
00210 INPUT_BEG:
                      0
               BLKB
00210 INPUT_CHAN:
               .BLKB
00214 INPUT_FLAGS:
                      2
               .BLKB
```

```
00216 INPUT_PADDING:
               .BLKB
                      2
00218 INPUT_FAB:
               .BLKB
0021C INPUT_NAM:
               BLKB
00220 INPUT_BCB:
               .BLKB
00224 INPUT_QUAL:
               .BLKB
00228 INPUT_BAD:
               .BLKB
0022C INPUT_BLOCK:
               .BLKB
00230 INPUT_MAXBLOCK:
               .BLKB
00234 INPUT_MEDIA_ID:
               .BLKB
00238 INPUT_NAMEDESC:
                      8
               .BLKB
00240 INPUT_STATBLK:
                      8
               .BLKB
00248 INPUT_HDR_BEG:
                      0
00248 INPUT_CREDATE:
                      8
               .BLKB
00250 INPUT_REVDATE:
                      8
               BLKB
00258 INPUT_EXPOATE:
               .BLKB
00260 INPUT_BAKDATE:
                      8
               BLKB
00268 INPUT_FILEOWNER:
               .BLKB
0026C INPUT_FILECHAR:
               BLKB
00270 INPUT_RECATTR:
                      32
               .BLKB
00290 INPUT_HDR_END:
                      0
00290 INPUT_END:
               BLKB
00290 INPUT_PROC_LIST:
               .B[KB
00294 INPUT_PLACEMENT:
               .BLKB 8
0029C INPUT_VBN_LIST:
002A4 INPUT_PLACE_LEN:
               BL RB
002A6 IMPUT_PADDING_2:
               .BLKB
002A8 OUTPUT_BEG:
                      0
               .BLKB
002A8 OUTPUT_CHAN:
002AC OUTPUT_FLAGS:
```

```
.BLKB
002AE OUTPUT_PADDING:
                       2
               .BLKB
002B0 OUTPUT_FAB:
               .BLKB
00284 OUTPUT_NAM:
               .BLKB
00288 OUTPUT_BCB:
               .BLKB
002BC OUTPUT_QUAL:
               .BLKB
002CO OUTPUT_BAD:
002C4 OUTPUT_BLOCK:
               .BLKB
00208 OUTPUT_MAXBLOCK:
               .BLKB
002CC OUTPUT_DEVGEOM:
                       8
002D4 OUTPUT_ATTBUF :
                      144
               .BLKB
00364 OUTPUT_END:
                       0
00364 LIST_TOTFILES:
               .BLKB
00368 LIST_TOTSIZE:
               .BLKB
0036C VERIFY_FAB:
               .BLKB
00370 VERIFY_USE_COUNT:
              .B[KB
00374 VERIFY_QUAL:
               .BLKB
00378 COMPARE_BCB:
               .BLKB
0037C FAST_BUFFER:
               .BLKB
00380 FAST_BUFFER_SIZE:
              .BLRB
00384 FAST_RVN:
               .BLKB
00385 FAST_PADDING:
               .BLKB
00386 DIR_VERLIMIT:
               .BLKB
00388 FAST_VOL_BEG:
                      0
               BLKB
00388 FAST_IMAP_SIZE:
              .BLKB
0038C FAST_IMAP:
              .BLKB
00390 FAST_HDR_OFFSET:
              .BLKB
00394 FAST_BOOT_LBN:
              .BLKB
00398 FAST_VOL_END:
                      0
              BLKB
```

```
00398 JOUR_BUFFER:
0039C JOUR_DIR:
               .BLKB
003A0 JOUR_HIBLK:
               .BLKB
003A4 JOUR_EFBLK:
               BLKB
003A8 JOUR_INBLK:
               .BLKB
003AC JOUR_FFBYTE:
003AE JOUR_INBYTE:
003B0 JOUR_STRUCT_LEV:
               .BLRB
003B2 JOUR_COUNT:
003B3 JOUR_REVERSE:
                      1
               .BLKB
003B4 JOUR_EXSZ:
               .BLKB
003B6 JOUR_PADDING:
003B8 CHKPT_HIGH_SP:
003BC CHKPT_LOW_SP:
               BLKB
003CO CHKPT_STACK:
               .BLKB
003C4 CHKPT_VARS:
               .BLKB
003C8 CHKPT_STATUS:
003CC DIR_BEG:.BLXB
                       0
003CC DIR CHAN:
00300 DIR NAM: BLKB
00304 DIR_DEV_DESC:
00308 DIR_SEL_DIR:
                       8
               .BLKB
003E0 DIR_SEL_NTV:
                       8
003E8 DIR_STRUCLEV:
               .BLKB
003E9 DIR_LEVELS:
               .BLKB
003EA DIR_FLAGS:
               .BLKB
003EB DIR_STATUS:
               .BLKB
003EC DIR_STRING:
               .BLKB
                      320
0052C DIR_STACK:
                      612
               .BLKB
00790 DIR_SP: .BLKB
```

```
H 2
LISTIQUE
                                                                               16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
                   List a journal file
                                                                                                             VAX-11 Bliss-32 V4.0-742 [BACKUP.SRC]LISTJOUR.B32:1
                                                                                                                                                                (3)
V04-000
                    SELECT FILE - select file from journal
                                                                          00794 DIR_SEL_LATEST:
                                                                          00798 DIR END: BLKB
00798 DIR SCANLIMIT:
                                                                                                     0
                                                                                                     36
                                                                                            .BLKB
                                                                          007BC INPUT_MTL:
                                                                                             BLKB
                                                                          007CO OUTPUT_MTL:
                                                                                            .BLKB
                                                                          007C4 CURRENT_MTL:
                                                                                            .BLKB
                                                                          007C8 CURRENT_VCB:
                                                                                            .BLKB
                                                                          007CC CURRENT_WCB:
                                                                          00700 ACL_FIB_DESCR:
                                                                                            .BLKB
                                                                          00708 ACL_FIB: BLKB 00818 ACL_LENGTH:
                                                                          0081C ACL_BUFFER:
                                                                                            .BLKB
                                                                          00820 CRYP_IN_CONTEXT:
                                                                                            .BLKB
                                                                          00824 CRYP_OU_CONTEXT:
                                                                                            .BLKB
                                                                          00828 CRYP_DA_CONTEXT:
                                                                                            .BLKB
                                                                          0082C CRYP_DATA_ENCIV:
                                                                                            .BLKB
                                                                          00834 CRYP_DATA_CODE:
                                                                                            .BLKB
                                                                          00838 CRYP_DATA_KEY:
                                                                                            BLKB
                                                                          00840 CRYP_DATA_IV:
                                                                                            .BLKB
                                                                                                     8
                                                                          00848 CRYP_DATA_CKSM:
                                                                                            .BLKB
                                                                                           .EXTRN
                                                                                                    MATCH, OPEN JOURNAL READ JOURNAL, CLOSE JOURNAL
                                                                                           .EXTRN
                                                                                           .EXTRN
                                                                                                    LIST_FAO, LIST_EOL
                                                                                           .PSECT
                                                                                                     CODE, NOWRT, 2
                                                                   001C 00000 SELECT_FILE:
                                                                                           .WORD
                                                                                                     Save R2,R3,R4
                                                                                                                                                             1670
                                               54
53
63
63
50
                                                   0000000G
                                                                 00
                                                                         00002
                                                                                                    MATCH, R4
QUAL+8, R3
                                                                                           MOVAB
                                                   00000000
                                                                 ĔĔ
                                                                      9Ĕ
                                                                         00009
                                                                                           MOVAB
                              17
                                                                 02
03
                                                                                                    #2, QUÁL+8, 1$
#3, QUAL+8, 1$
CRÉDATE, RO
4(RO), QUAL+20
                                                                      EĪ
                                                                         00010
                                                                                           BBC
                                                                                                                                                              1706
                                                                      ĒÔ
                                                                         00014
                                                                                           BBS
                                                                 AČ
                                                                      DŎ
                                                                         00018
                                                                                           MOVL
                                                                                                                                                              1709
                                                                 A0
50
06
                                                A3
                                                           04
                                                                      DÍ
                                                                         00010
                                         00
                                                                                           CMPL
                                                                      14
                                                                         00021
                                                                                           BGTRU
                                                                                                     6$
1$
                                                                      12
                                                                         00023
                                                                                           BNEQ
                                                                                                                                                             1710
                                                                                                     (RO), QUAL+16
                                                                 60
55
                                         08
                                                A3
                                                                         00025
                                                                      D1
                                                                                           CMPL
```

1E

00029

BGEQU

6\$

L1STJOUR V04-000	List a journal SELECT_FILE -	l file select fi	le from journ	al	1 16-5 14-5	2 ep-1984 00:10: ep-1984 11:53:	02 VAX-11 Bliss-32 V4.0-742 55 [BACKUP.SRC]LISTJOUR.B32;1	Page 12 (3)
	18 13	05 05	A3 A3 50 08 A3 04	04 05	E1 0002B 1\$ E0 00030 D0 00035 D1 00039 1F 0003E 12 00040	BBC BBS	#4, QUAL+13, 2\$ #5, QUAL+13, 2\$ CREDATE, RO 4(RO), QUAL+36	: 1716
		10	50 08 A3 04	A 0	DO 00035 D1 00039 1F 0003E	MOVL CMPL Blssu	CREDATE, RU 4(RO), QUAL+36 6\$ 2\$	1719
		18	A3	06 60 38 04 A3	12 00040 D1 00042 1F 00046	LMPL	2\$ (RO), QUAL+32 6\$	1720
	17	01	A3 52 28	04 A3 11	E1 AAA/A DE	: BBC MOVL	#4, QUAL+9, 4\$ QUAL+48, EXCL	1726 1732 1733 1735
			04		13 00051 3\$ 9F 00053 DD 00056	PUSHAB PUSHL	4\$ 4(EXCL) NAME	; 1/33 ; 1735 ;
			64 21 52	50 62	DO 0004D 13 00051 3\$ 9F 00053 DD 00056 FB 00059 EB 0005C DO 0005F 11 00062	BLBS Movl	#2, MATCH RO, 5\$ (EXCL), EXCL	1736
	1A		A3 52 30	A2 02 50 62 ED 33	PI WWW.	BRB:	3\$ #3, QUAL+13, 7\$ QUAL+68, SELE	: 1736 : 1733 : 1743 : 1749
		·	04	11	DO 00069 13 0006D 5\$ 9F 0006F DD 00072	BEQL PUSHAB	6\$ 4(SELE)	1752 1754
			64 08 52	02 50	FB 00075 EB 00078	CALLS BLBS	NAME #2, MATCH RO, 7\$	
) <i>(</i>		11 0007E 04 00080 6\$	BRB: CLRL	(SELE), SELE 5\$ RO	; 1755 ; 1752 ; 1759
		9	50	01	04 00082 00 00083 7\$ 04 00086	RET: MOVL RET	#1, R0	1764

|; Routine Size: 135 bytes. Routine Base: CODE + 0000

```
2
LISTJOUR
                                                                                                                                                                                              16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
                                                List a journal file
                                                                                                                                                                                                                                                                      VAX-11 Bliss-32 V4.0-742 [BACKJP.SRC]LISTJOUR.B32;1
V04-000
                                               LIST_JOURNAL - main journal list routine
                                                             1 %SBTTL 'LIST JOURNAL - main journal list routine'
1 GLOBAL ROUTINE LIST JOURNAL: NOVALUE=
        1767
                                               1768
                                               1769
                                               1770
                                                                             FUNCTIONAL DESCRIPTION:
                                                1771
                                                                                                This routine is the driver for listing of a journal file.
                                               1772
                                                                              INPUT PARAMETERS:
                                               1774
                                                                                               NONE
                                               1775
                                               1776
                                                                              IMPLICIT INPUTS:
                                               1777
                                                                                               NONE
                                               1778
                                               1779
                                                                             OUTPUT PARAMETERS:
                                               1780
                                                                                               NONE
                                               1781
                                               1782
1783
                                                                             IMPLICIT OUTPUTS:
                                                                                                NONE
                                               1784
                                               1785
                                                                             ROUTINE VALUE:
                                               1786
                                                                                               NONE
                                               1787
                                               1788
                                                                             SIDE EFFECTS:
                                               1789
                                                                                               NONE
                                               1790
                                               1791
                                               1792
1793
                                                                      BEGIN
                                               1794
                                                                      LITERAL
                                               1795
                                                                                               STR_LENGTH = %CHARCOUNT(' file header only'),
BUFFER_LENGTH = BJL$C_DIR_LEN + BJL$S_FILENAME + STR_LENGTH;
                                               1796
1797
                                               1798
                                               1799
                                                                      LOCAL
                                               1800
                                                                                               STR:
                                                                                                                                               LONG INITIAL (UPLIT BYTE (' file header only')),
                                                                                                                                              REF BBLOCK, ! Pointer to FAB for journal process of the state of the s
                                               1801
                                                                                               FAB:
                                                                                                                                                                                                ! Pointer to FAB for journal file
                                                1802
                                                                                               BUFFER:
                                                1803
                                                                                               SSNAME_LEN:
SSNAME:
                                                                                                                                                                                                                                                   Length of SSNAME
                                               1804
1805
1806
1807
                                                                                                                                                                                                                                                    SSNAME buffer
                                                                                               VOLUME:
                                                                                                                                                                                                                                                    VOLUME buffer
                                                                                               DIR LEN:
DIRECTORY:
                                                                                                                                                                                                                                                    Length of DIRECTORY
                                                                                                                                              BBLOCK[BJLSC_DIR_LEN],
                                                                                                                                                                                                                                                   DIRECTORY buffer
                                               1808
1809
                                                                                                                                                                                                   True if SSNAME or VOLUME changed
                                                                                                CHANGE,
                                                                                                                                               VECTOR[P$SIZE]; ! Impure area
                                                                                               PSAREA:
                                               1810
1811
1812
1813
1814
1815
1816
                                                                       GLOBAL REGISTER
                                                                                               PS = 11:
                                                                                                                                               REF VECTOR;
                                                                                                                                                                                              ! Impure area base register
                                                                             Initialize impure area.
                                                                      PS = PSAREA;
LIST_DESC[0] = LIST_SIZE;
                                               1818
1819
                                                                       LIST_DESC[1] = _LIST_BUFFER;
                                                1820
                                                                 2 ! Do the listing.
                                                1821
```

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[BJLSK_DIRECTORY]:

Save the DIRECTORY record in a local.

BEGIN

1876 1877

1878

```
L 2
16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
LISTJOUR
                  List a journal file
                                                                                                      VAX-11 Bliss-32 V4.0-742
V04-000
                  LIST_JOURNAL - main journal list routine
                                                                                                      [BACKUP.SRC]LISTJOUR.B32:1
   328
329
330
331
                                          IF .BUFFER[BJL$B_SIZE] LEQU BJL$C_DIR_LEN+1
                  1880
                                         THEN
                  1881
                                              BEGIN
                  1882
                                              DIR_LEN = .BUFFER[BJL$B_SIZE] - 1;
   332
                                              CH$MOVE(.DIR_LEN, BUFFER[BJL$B_DATA], DIRECTORY);
   333
                  1884
                                              END:
  INFO#252
                              L1:1879
  Test expression is always true 334 1885 3
   END;
                  1886
1887
                  1888
                                     [BJL$K_FILE]:
BEGIN
                  1889
                  1890
                                         LOCAL
                  1891
                                              BUFF_SIZE
BUFF_FLAGS
                                                                 : WORD
                                                                : BBLOCK [4]
                  1892
                  1893
                                              NAME_DESC
                                                                 : VECTOR[2]:
                                                                                   ! Descriptor for name string
                  1894
                  1895
                  1896
                                         BUFF_SIZE = .BUFFER [ BJL$B_SIZE ] ;
                  1897
                  1898
                                         If .JOUR_STRUCT_LEV GTRU BJL$K_LEVEL1
                  1899
                                         THEN
                  1900
                  1901
                                                Adjust the name size to remove the flag longword
   351
                  1902
   352
353
                                              BUFF_SIZE = .BUFF_SIZE - 4;
                  1904
   354
                  1905
                                              ! Get the flags longword ( size +1 to skip size field )
   355
                  1906
   356
                  1907
                                              BUFF_FLAGS = .BUFFER [.BUFF_SIZE+1,0,32,0];
   357
                  1908
                                              END
   358
                  1909
                                         ELSE
   359
                  1910
                                              BUFF_FLAGS = 0 ;
   360
                  1911
                  1912
   361
                                           Assemble the complete name string.
   362
   363
                  1914
                                         NAME_DESC[1] = BUFFER[0,0,0,0];
   364
                  1915
                                         NAME_DESC[0] = .BUFF_SIZE
   365
                  1916
                                                                            Adjust for size field
   366
367
368
                  1917
                                                           + .DIR_LEN
+ 2;
                                                                          ! Add in directory name length! Adjust for '[]'
                  1918
                  1919
   369
370
                  1920
                                         CH$COPY(
                  1921
1922
1923
                                              BUFFER[BJL$B_DATA],
   371
   372
373
                                              BUFFER + BUFFER_LENGTH - BUFFER[.DIR_LEN+2,0,0,0],
   374
375
376
377
378
379
                                              BUFFER[.DIR_LEN\2,0,0,0]);
                  1926
                                         CH$MOVE (
                                              .DIR_LEN.
DIRECTORY
                  1928
                                         BUFFER[0,0,8,0] = %C'[';
                  1929
                  1930
                                         BUFFER[.DIR_LEN+1,0,8,0] = XC']';
   380
                  1931
                  1932
   381
   382
                                         IF .BUFF_FLAGS[BJL$V_HEADONLY]
```

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(4)

```
M 2
LISTJOUR
                                                                                                                                                                                                                                                                                                                                                       16-Sep-1984 00:10:02
14-Sep-1984 11:53:55
                                                                                     List a journal file
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VAX-11 Bliss-32 V4.0-742
V04-000
                                                                                     LIST_JOURNAL - main journal list routine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [BACKUP.SRC]LISTJOUR.B32:1
               383
384
385
                                                                                      1934
1935
                                                                                                                                                                                                  THEN
                                                                                                                                                                                                                 BEGIN
CHSCOPY ( STR LENGTH,
STR,
                                                                                      1936
               386
387
388
                                                                                       1938
                                                                                                                                                                                                                      BUFFER LENGTH - .NAME_DESC[0],
BUFFER[.NAME_DESC[0], 0,8,0]);
NAME_DESC[0] = .NAME_DESC[0] + STR_LENGTH;
                                                                                       1939
                389
                                                                                     1940
1941
1942
1943
1944
1945
1946
1948
1949
                390
391
392
393
394
395
                                                                                                                                                                                                                      END:
                                                                                                                                                                                                          Write the name string, if the selection criteria are satisfied.
                                                                                                                                                                                                  IF_SELECT_FILE(NAME_DESC, SSNAME[BJL$Q_CREDATE])
                396
397
                                                                                                                                                                                                  THEN
                                                                                                                                                                                                                      BEGIN
                398
                399
                                                                                                                                                                                                                                 If the save set or the volume number has changed since the
                400
                                                                                                                                                                                                                                 last line, write the new information.
                401
               402
                                                                                                                                                                                                                       IF . CHANGE
                                                                                      1954
                                                                                                                                                                                                                       THEN
                404
                                                                                     1955
                                                                                                                                                                                                                                           BEGIN
                                                                                                                                                                                                                                       EOL_();
FAO_(

'Save set !AD created on !%D',
.SSNAME_LEN - $BYTEOFFSET(BJL$T_SSNAME),
.SSNAME[BJL$T_SSNAME],
.SSNAME[BJL$Q_CREDATE]);

COL_();

EOL_();

FAO_();
FAO_
                405
                                                                                     1956
                406
                                                                                    1957
                407
                                                                                    1958
                408
                                                                                    1959
                409
                                                                                    1960
               410
                                                                                     1961
                                                                                                                                                                                                                                       EOL_();
FAO_(
'Volume number !UW, volume label !AD',
'Volume number !UW, volume number !UW, volume label !AD',
'Volume number !UW, volume numb
               411
                                                                                     1962
                                                                                    1963
               412
               413
                                                                                    1964
               414
                                                                                    1965
                                                                                                                                                                                                                                                                BJL$S_VOLNAME;

(IF .TVOLUME[BJL$T_VOLNAME]) < 0.8 > GTRU %C' '
THEN VOLUME[BJ[$T_VOLNAME]

ELSE UPLIT BYTE ("unknown ')));
               415
                                                                                    1966
               416
                                                                                    1967
                                                                                    1968
               417
               418
                                                                                     1969
               419
                                                                                     1970
                                                                                                                                                                                                                                           EOL ();
CHANGE = FALSE;
              1971
                                                                                     1972
1973
                                                                                                                                                                                                                                           END:
                                                                                     1974
                                                                                     1975
                                                                                                                                                                                                                                Write the file specification.
                                                                                     1976
                                                                                                                                                                                                                    FAO_('EOL_();
END;
                                                                                                                                                                                                                                                                             !AS', NAME_DESC);
                                                                                      1978
                                                                                      1979
                                                                                      1980
                                                                                                                                                                                                 END:
                                                                                      1981
                                                                                     1982
1983
                                                                                                                                                                            [INRANGE, OUTRANGE]:
                                                                                      1984
                                                                                      1985
                                                                                     1986
                                                                                     1987
                                                                                                                                                                           TES:
                                                                                     1988
                                                                                                                                                      END:
                                                                                                                                CLOSE_JOURNAL (FALSE);
                438
                                                                                     1989
```

END:

Page

LISTJOUR V04-000

16-Sep-1984	00:10:0
16-Sep-1984 14-Sep-1984	11:53:5

					_											·			• • •
6 2 6	1 20 3 20	20 65 44 44 65 60	72 60 41 25 62 20 20	65 69 21 21 60 65 20	64 66 20 75 6D 20	61 20 44 74 6E 6E 75 20	65 65 65 65 67 20 60 20 53	68 61 21 73 20 65 6F 6E 41	20 6E 20 64 67 64 77 21	65 72 65 65 720 41 6F 20	6C 75 6F 76 76 76 221 620	69 6F 20 6F 57 20 6B 20	669 444 565 565 6E0	20 617 41 1723 675 07	00096 00098 000A7 000B0 000CC 000DB 000EA 000F0	P.AAA: P.AAC: P.AAC: P.AAC: P.AAE: P.AAE:	.ASCII .ASCII .ASCII .ASCII	<pre>\ file header only\ <23>\Journal file !AD on !%D\ <27>\Save set !AD created on !%D\ \#Volume number !UW, volume label !AD\ \unknown \ <7>\ !AS\</pre>	
ł													(OFFC	00000		.ENTRY	LIST_JOURNAL, Save R2.R3.R4.R5.R6.R7.R8.R9;	1766
										5E 5A	F	C 28 F 78	CE CF	9E 9E			MOVAB MOVAB	R10,R11 -984(SP), SP P.AAA, STR	1793
										5B			CE CF 59	D4 D4	0000C		CLRL CLRL	SSNAME LEN DIR LEN	
								C)4	6B AB	0	08 100 08	AE 8F AB	9E 3C 9E	00014 00019		MOVAB MOVZWL MOVAB	P\$ARĒĀ, P\$ #256, (P\$) 8(R11), 4(P\$)	: 1816 : 1817 : 1818
							000	0000)0G	00 50 0	0000	000	7Ë 02 • EF	7C FB D0	00020		CLRQ CALLS MOVL	-(SP) #2. OPEN JOURNAL	1823 1828
										7E	0	098 097	7E CO CO	D4 DD 9A			CLRL PUSHL MOVZBL	QUAL+52, FAB -(SP) 152(FAB) 151(FAB) -(SB)	1832
1								0000		00	F	F 57	CF 04	9F FB	00039 0003D		PUSHAB Calls	151(FAB), -(SP) P.AAB #4, LIST_FAO	
							000	0000	10G	00	F	E 70	00 57 CD	FB D4 9F	00044 0004B 0004D	1\$:	CALLS CLRL PUSHAB	#O, LIST_EOL CHANGE BUFFER	1833 1838 1839
							000	0000)0G	00 03	·		01 50	FB E8	00051 00058		CALLS BLBS	#1, READ_JOURNAL	1037
		00	47			03 0036	•		00	01)22	F	E71	0140 CD 000A	31 8F	0005B 0005E 00064	2 \$: 3 \$:	BRW CASEB .WORD	16\$ BUFFER+1, #1, #3 4\$-3\$,-	1841
																		5\$-3\$,- 7\$-3\$,- 8\$-3\$	
										29	F	E 70	DF CD	11 91	0006E	4\$:	BRB CMPB	8\$-3\$ 1\$ BUFFER, #41	1850
1										59	F	E 70	59	9A D7			BGTRU MOVZBL DECL	1\$ BUFFER, SSNAME_LEN SSNAME_LEN	1853
1				F	E48	CD)	FE7	'2	CD OF	£	E 70	59 0f	28 11 91	0007C 00084 00086	ς ε .	DECL MOVC3 BRB CMPB	SSNAME_LEN SSNAME LEN, BUFFER+2, SSNAME 6\$ BUFFER, #15	1854 1855 1865
				F	E 38	CD)	FE7	'2	CD 57	r	210	CD CO OE O1 B3	12 28	0008B 0008D		BNEQ MOVC3	1\$; #14, BUFFER+2, VOLUME ;	1868
										5/			01 B 3	D0 11	00095 00098	65 :	MOVL BRB	#1. CHANGE	1869 1841

L1STJOUR V04-000			nal file L - main j	ourna	l list rou	ıtine		16 16	3 -Sep-19 -Sep-19	84 00:10 84 11:53	:02	VAX-11 Bliss-32 V4.0-742 [BACKUP.SRC]LISTJOUR.B32;1	Page	18
		- 16 CE	FE72 0101 04	56 CD 51 8F 51 50 58 AE 506 51 52	FE70 00000000° FE71 C	D662DF0410E28D100D	97819182CF014ECE7EE2	0009A 0009F 000A1 000A9 000B9 000B9 000BE 000C6 000CB 000CB 000CB 000CB 000CB	7\$: 8\$:	MOVZBL DECL MOVC3 BRB MOVZBW CMPW BLEQU SUBW2 MOVZWL PUSHAB MOVZWL BRB CLRL MOVAB MOVAB DECL MOVAB MOVAB SUBL2	BUFFI DIR I DIR I DIR I BUFFI BUFFI BUFFI RO BUFFI RO BUFFI RO BUFFI RO BUFFI	ER, DIR_LEN LEN LEN, BUFFER+2, DIRECTORY ER, BUFF_SIZE _STRUCT_CEV, #257 BUFF_SIZE SIZE, RO ER+1[RO])+, BUFF_FLAGS FLAGS ER, NAME_DESC+4 SIZE, RO R_LEN)[RO], NAME_DESC ER+400, R1 ER+2[DIR_LEN], R2 R1		1882 1883 1841 1896 1898 1907 1898 1910 1914 1916 1918 1921 1924
	FE		0110 FE70 FE71 00000190	18 85 6A 6E CF 6B 50 00 00 20	58 5D FE70 00 B FE48 04 FE48 FE50 F8 FE63	658856C141CA0550CCAC00C7	29993EC 0FFB99BFFFBB1B	000E9 000F9 000F9 000F9 0010F9 001118 001128 001133 001133 001157 0015F		MOVC5 MOVB MOVB BLBC3 MOVAB SUBL3 MOVC5 ADDL2B PUSHAB	DIR- #93, #93, BUFF NAME BUT7, *17, SSNAI NO, II SSNAI P.AA #0, II VOLUI 12\$	LIST_FAO LIST_EOL ME, #32		1925 1929 1930 1931 1933 1939 1940 1941 1946 1953 1956 1961
			00000000G 0000000G		FE 38 FE 83 FE 44 FE 51	05F0CDF0075FF	11 9E DD DD	00163 00165 0016A		MOVAB BRB MOVAB PUSHL PUSHAB CALLS CALLS CLRL PUSHAB	13\$ P.AAI RO #12 VOLUI P.AAI	LIST_FAO LIST_EOL GE		1970 1971 1977

L1STJOUR V04-000	List a journal file LIST_JOURNAL - main journal (list routine	C 3 16-Sep-1984 00:10:02 14-Sep-1984 11:53:55	2 VAX-11 Bliss-32 V4.0-742 5 [BACKUP.SRC]LISTJOUR.B32;1	Page 19 (4)
	00000000G 00 0000000G 00		194 (ALLS #0 198 158: BRW 19	2, LIST_FAO 0, LIST_EOL	; 1978 : 1839
	0000000G 00	7E D4 001 01 FB 001 04 001	IAO CALLS #1	(SP) 1, CLOSE_JOURNAL	. 1989 . 1990

; Routine Size: 424 bytes, Routine Base: CODE + 0104

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D 3 16-Sep-1984 00:10:02 14-Sep-1984 11:53:55 LISTIOUR List a journal file VAX-11 Bliss-32 V4.0-742 V04-000 LIST_JOURNAL - main journal list routine [BACKUP.SRC]LISTJOUR.B32:1 : 441 1992 O ELUDOM PSECT SUMMARY Name Bytes Attributes 2124 NOVEC, WRT. RD , NOEXE, NOSHR, LCL, REL, OVR, NOPIC, ALIGN(2) 684 NOVEC, NOWRT, RD , EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2) COMMON CODE Library Statistics ----- Symbols -----Pages Processing File Total Loaded Percent Mapped Time 9776 581 _\$255\$DUA28:[SYSLIB]STARLET.L32;1 0 00:01.1 6 ; Information: : Warnings: 0 : Errors: Ŏ COMMAND QUALIFIERS ; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:LISTJOUR/OBJ=OBJ\$:LISTJOUR MSRC\$:LISTJOUR/UPDATE=(ENH\$:LISTJOUR) 559 code + 2249 data bytes 00:23.3 : Size: Run Time: 01:21.8 Elapsed Time:

Lines/CPU Min:

Lexemes/CPU-Min: 45974 : Memory Used: 313 pages : Compilation Complete Page 20 (5)

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